

IN THE SPECIFICATION

Please replace the paragraph at page 3, line 24-31, with the following:

In addition to the drawbacks noted above, the tungsten-covered silicon bridge of U.S. Patent 4,976,200 poses another difficulty due to the fact that the melting point of tungsten, ~~3695 ° Kelvin ("° K")~~ 3695 Kelvin ("K"), is higher than the vaporization temperature ~~(2628 °K)~~ (2628 K) of silicon. This impedes the effectiveness of the plasma formed from the silicon in igniting the energetic material, because the tungsten layer of the bridge overlies the silicon and is therefore interposed as a solid layer between the vaporizing silicon and the energetic material charge against which the semiconductor bridge igniter is placed. The resulting absorption of energy by the solid tungsten lessens the efficiency of tungsten bridge devices.

Please replace the paragraph at page 3, line 32 – page 4, line 8, with the following:

The titanium semiconductor bridge igniter of the present invention utilizes a thin film of titanium deposited on the silicon bridge and thereby provides a product which is greatly superior to the tungsten-layered silicon bridge of U.S. Patent 4,976,200. The melting point of titanium (1660 °C) is only slightly higher than that of silicon (1420 °C) and much lower than silicon's vaporization point of ~~2628 °K~~ 2628 K, so that when the bridge is activated by an electrical current, or an electrical discharge from a capacitor, the titanium layer interposed between the silicon bridge and the energetic material charge melts well before the silicon vaporizes at ~~2628 °K~~ 2628 K. The molten titanium does not impede the plasma generated from the silicon bridge from impinging upon and igniting the energetic material charge against which the titanium semiconductor bridge igniter is placed.